Microorganisms



Main sol. 1092

| Sea Salt (SIGMA) | 30.00 | g |
|--------------------------------|---------|----|
| Wolfe's mineral elixir | 1.00 | ml |
| Sodium resazurin (0.1% w/v) | 0.50 | ml |
| Sulfur (powdered) | 3.00 | g |
| NaHCO ₃ | 2.50 | g |
| Yeast extract | 2.00 | g |
| Wolin's vitamin solution (10x) | 2.00 | ml |
| $Na_2S \times 9 H_2O$ | 0.50 | g |
| Distilled water | 1000.00 | ml |

- 1. Dissolve ingredients (except sulfur, bicarbonate, yeast extract, vitamins and sulfide) and sparge medium with 80% H_2 and 20% CO_2 gas mixture for 30 45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic serum vials (e.g., Balch-type tubes) containing already the appropriate amount of sulfur, only to 30% of their volume to allow for a large headspace. Autoclave at $110^{\circ}C$ for 20 min. Add yeast extract, vitamins and sulfide form sterile anoxic stock solutions prepared under 100% N_2 gas and bicarbonate from a sterile anoxic stock solution prepared under 80% N_2 and 20% CO_2 gas mixture. The vitamin solution should be sterilized by filtration. Adjust pH of the complete medium to 7.0-7.2.
- 2. After inoculation pressurize vessels with sterile 80% $\rm H_2$ and 20% $\rm CO_2$ gas mixture to 2 bar overpressure.